

## Chapter 4

# Putting Giddens into Practice

Anthony Giddens' theory of structuration provides a theoretical, ontological framework for understanding social life, and as such, offers the potential to provide new perspectives of the social interactions that constitute education. However, educational researchers have been slow to embrace Giddens' ideas. This may be due to a continuing debate concerning the validity of structuration as a theoretical basis for sociological research, as well as the lack of established conventions for practicably employing structuration. This chapter reviews some critics' concerns regarding the validity of structuration. Many of these relate to the notion of the duality of structure and agency, both in terms of how well, if at all, this notion reflects real life, and whether or not it is possible to effectively assess human behaviour in terms of such a duality. Despite these concerns, Giddens' ideas are becoming incorporated into an increasing amount of social research, in fields that range from archaeology to business management. This chapter provides examples of the effective use of structuration, and highlights the fact that although Giddens' did not prescribe the knowledge to be sought, nor the methodology to be followed, in order to use structuration in practical research, the ideals of structuration can be adapted for use across a wide range of social contexts. Some of the challenges researchers face in using structuration in an educational context are discussed, and an example of how to effectively adapt the ideals of structuration to a specific research issue—the development of educational rhetoric–reality gaps—is provided.

### 4.1 Applying Structuration as an Ontological Framework

Structuration provides a theoretical ontological framework for taking a generic perspective on social life (Cohen 1989), but the validity of its use as a theoretical basis for sociological research is the subject of continuing and vigorous debate. Of particular concern is the limited evidence that structuration provides valid, practical

and ontological applicability to real social contexts (Dear and Moos 1994; Phipps 2001; Thrift 1985). Structuration is essentially a social science meta-theory, a theory that effectively encompasses others. Structuration therefore does not constrain the user to a specific research focus such as, for example, feminist or Marxist theories, nor does it attempt to yield positivist absolutes in the terms of cause and effect, or true and false (Cohen 1989; Yates 1997). The lack of a specific focus has led some (e.g. Murgatroyd 1989) to criticise structuration as lacking the critical elements of an authentic social theory. Turner (1990) agreed, noting that the lack of demonstrated normative components in the theory essentially renders structuration nothing more than a perspective of what should be, rather than what is. Thus, while structuration provides an ontological framework, it does not prescribe the knowledge to be sought, nor the methodology to be followed, in order to employ this in practical research, leaving researchers to ask “how exactly do we use the insights of structuration theory?” (Gregson 1987, p. 90). Rose (1998) added that theories are only as beneficial as their ability to guide and improve practice. Many researchers consider that structuration does not meet this criterion, and that it is no more than “an analytical scheme...a system of categories for denoting important properties of the universe”, that is, merely a categorisation system for analytical comparisons (Turner 1990, p. 113).

Giddens reminded critics who wanted epistemological and methodological directions that structuration is not intended to be a method of research or a methodology, and that “the concepts of structuration theory, as with any competing theoretical perspective, should for many research purposes be regarded as sensitizing devices, nothing more” (Giddens 1984, p. 327). Giddens explained that the theory of structuration is not intended to be imported “*en bloc*” into a single empirical research (Giddens 1989, p. 294, original italics). The sensitising devices of structuration provide a mechanism for making sense of the interrelated processes that constitute social life (Giddens 1984; Turner 2003)—together these form an ontology of social life, or an “ontology of potentials”:

The structurationist ontology is addressed exclusively to the constitutive potentials of social life: the generic human capacities and fundamental conditions through which the course and outcomes of social processes and events are generated and shaped in the manifold ways in which this can occur (Cohen 1989, p. 17).

This comment reflected Giddens’ idea that structures and patterns of social life exist only at the time and location that processes of human interaction occur. The importance of process prompted Sawyer (2002) to describe structuration as a “process ontology of the social world” (p. 28). Hutchins (1995) suggested that such a process ontology should be considered a socioculturalism, because culture is not formed by the collection of physical or non-physical entities, but developed from a system of processes that define the “fundamental nature of reality” (quoted in Sawyer 2002, p. 291).

Irrespective of the apparent lack of detailed information regarding how to use structuration, since its inception, its process ontology framework has been effectively employed to provide new ways of interpreting ideas from traditional fields of study. Fien (1993), for example, in an examination of how to improve education *for*

the environment, identified the potential contribution of structuration “as a dialectical theory of social action for critical pedagogical practice in environmental education” (p. 13). Many researchers have used structuration to integrate qualitative and quantitative data from archival and secondary sources in order to investigate and analyse historical social phenomena. Taylor (2003), for example, employed structuration principles to interpret artefacts recovered from industrial archaeological sites in northern Queensland. Unlike traditional archaeological approaches, structuration provided insights into facets of agency within a specific historical landscape by acknowledging that structural artefacts shaped the society that simultaneously created them. Others have used a structuration ontological framework to understand the role of both structure and agency in the development of current social issues, including: power relationships within business organisations (Yates 1997); political relationships (Arts 2000); information systems technology (Jones and Karsten 2003); the interrelatedness of subjective and objective aspects of criminology (Vaughan 2001); workplace bullying as an example of specific human behaviour within a discrete context (Boucaut 2001); and the analysis of social inequalities related to geographical factors (Wilson and O’Huff 1994).

Despite the range of research problems to which the principles of structuration have been applied, a standard or preferred research approach has not been established. Structuration provides a mechanism for attaining diverse perspectives through exploration beyond a single event or action in order to incorporate the influence of both ongoing human practices and structural mechanisms (Yates 1997). In light of this, research practices must embrace the unique aspects of structuration (Stones 2005), particularly: (in)separability of structure and agency and resulting issues of temporality (Archer 1996); context; and social change (Thrift 1985). These unique features and the implications for employing a structuration ontological framework in an educational research context are discussed below.

### ***4.1.1 (In)Separability of Structure and Agency***

Social science researchers have long acknowledged the importance of both structure and agency in defining social life. Traditional research methodologies considered these to be mutually involved, but have tended to analyse them as distinct and separate influences (Archer 1996). Archer (1995) criticised Giddens’ notion of the duality of structure and agency as being unable to inform social analysis because “one cannot tell where structures begin and agents end”. She argued the need for a dualism where the “material and cultural conditions in which action takes place” are separated from the action itself (quoted in Stones 2005, p. 52). She indicated that such a dualistic approach was essential for exploring and explaining the relationship between structure and agency. Archer’s concerns are perhaps most evident, and indeed most significant, when considering well-established routines, such as those that influence the relationship between teachers and students. In these situations the boundary between an individual’s actions, internal structures and the real or

perceived taken-for-granted forms of knowledge drawn upon by an individual are most blurred. It is not even clear that individuals are able to identify these boundaries, let alone a researcher (Stones 2005).

Stones (2005) provided the example of an individual drawing on structures of domination—resources of power or transformative capacity—within a particular context. A teacher within a classroom for example, has a certain sense of the power at her disposal, and the power available to others (e.g. students). These ‘senses’ are internal structures—virtual senses of power relations, or knowledge, drawn upon by the teacher in order to perform any action. Structuration indicates that such internal knowledge forms structures that are not only drawn upon to perform an action, but are also reflected in the manner in which the action is “instantiated” (Giddens 1984, p. 25). It is not difficult to imagine that a teacher familiar with her working environment would, over time, develop a manner of acting, or a series of routines, which reflected her internal knowledge structures and which maintained the power relations of the classroom.

Mouzelis (1991) noted that this is just one end of a continuum of the relationship between internal structures and action. He suggested that individuals are often able to describe the internal and external factors behind a specific action, but that by definition, this reflexivity required a degree of separation of subject and object (Mouzelis 2000). Similarly, any duality becomes a dualism when an individual consciously and deliberately acts to distance themselves from the rules and resources of a situation, as required for the subject–object investigative observation required within much social research. Mouzelis (2000) suggested that the relationship between any individual and the rules and resources of a context is variable, and therefore it is not possible to offer a universal statement concerning subject–object duality or dualism.

Irrespective of these arguments, simultaneously comprehending all aspects of a society is problematic (Gregson 1987). Maintaining a focus on relationships without separately characterising the interacting components and how these may change through time and across space is difficult (Rose 1998; Sawyer 2002). Stones (2001) argued that being complexly interrelated does not prohibit structure and agency from being described and understood separately. In support of this, Cassidy and Tinning (2004) suggested adopting ‘methodological bracketing’, an approach whereby researchers momentarily concentrate on one side of the duality in order to identify and analyse aspects of either structure or agency.

Other critics of structuration however preferred social research frameworks that embraced analytical dualism, whereby human agency and social structures are analysed separately in order to determine their relative interplay (Willmott 1999). Archer (1982) for example, presented the theory of ‘morphogenesis’ as a research framework that supports analytical dualism. Like structuration, morphogenesis aims to understand individuals and their social environments, that is, both the subjective and objective factors within a social system, and acknowledges a relationship between these. Developed from ideas in general systems theory (Buckley 1967), morphogenesis explores the way in which a system (a socio-cultural system) might be modified. The theoretical focus of morphogenesis is the understanding

that “complex interchanges...produce change in a system’s given form, structure or state” such that socio-cultural systems are essentially endless cycles of “structural conditioning/social interaction/structural elaboration” (Archer 1982, p. 458). Analytical dualism frameworks, such as morphogenesis, however, deviate significantly from structuration in their outcomes to establish the causal interactions between these factors as opposed to revealing interrelationships or processes (Sawyer 2002). The relevance of the interrelationships between factors of structure and agency to any particular research focus depends on the context in which they are revealed.

### 4.1.2 Context

An important aspect of structuration is the notion that social interaction is strongly dependent on context, both in time and across space. Thrift (1985) observed that despite the prominence of context, structuration itself had not been placed within a specific time or place, and that the lack of a well-developed epistemological direction presented researchers with the problem of how to move from the “level of a generalized abstract ontology—applicable to contexts of social practices at all times and places—to a particular practice situated in a particular time and place”(Stones 2005, p. 35). It is important to note that ontology-in-situ may be quite removed from ontology-in-general, and therefore it is important to identify an appropriate context for any research employing structuration as an ontological framework (Giddens 1984).

Parker (2000) argued that a structuration ontological framework is only useful for investigating the types of problems which incorporate identifiable processes able to “produce durable structures, regular patterns of interaction and development tendencies with relatively high predictability on the one hand, and volatile, unstable, randomized, quick-changing unpredictability on the other” (p. 107). In other words, the use of structuration as an ontological framework is best reserved for contexts in which the duality of structure and agency present a wide spectrum of possibilities. Despite this, Parker (2000) suggested that no single study can adequately cover every aspect of the duality of structure and agency within even the simplest context, and that therefore researchers must outline a specific investigation focus. This requires identifying both the “broader institutionalised and system-structural frame” of the research problem, and the “action horizon, as identified by the agent and/or the researcher” (Stones 2005, p. 83). For example, Thompson (1989) noted that some structures, particularly rules, take priority in different situations, and are therefore “more important than others” for resolving different research problems (Stones 2005, p. 47). This is most evident in social situations characterised by a predictable set of structures and structure priorities, or “structural identity” (Thompson 1989, p. 65). For example, the investigation of educational issues may involve teachers who work in different schools. Each school not only has a unique and distinctive set of structural characteristics, but also encompasses many struc-

tures in common with all educational institutions. Thompson (1989) suggested that the latter are not those drawn upon in the daily activities of the teachers and students but are of a “different order”, existing as “a series of elements and their interrelations which together *limit* the kinds of rules which are possible and which thereby *delimit* the scope for institutional variation” (Thompson 1989, p. 66, original italics). Walsham (1998) however disagreed, stating that although the structural features of an institution may be well-established, they are maintained through the reflexive monitoring that accompanies the daily practices that define that institution, and that therefore any research must acknowledge the multilevel perspectives and influences of society, institutions and individuals.

### 4.1.3 Change

The way in which structuration incorporates the notion of change has been a focus for debate. The emphasis on routine in directing human agency has led to concerns that structuration is essentially a model for the process of social reproduction (Thrift 1985). The importance of routines in social life however, does not preclude social change. Even in the presence of well-established routines, individuals maintain the ability to consciously and unconsciously, and intentionally and unintentionally, act in ways that either sustain or modify routines (Yates 1997). This indicates that the modification of behavioural routines requires a change in intention and/or motivation, and possible modification to long-held value priorities, attitudes or beliefs. Many social theorists have indicated that such changes most likely occur in response to: sudden and/or unforeseen events such as death, disaster, accident or conflict; the development of new social insights or goals; and human creativity (Arts 2000; Taylor 2003; Thrift 1985). Social change therefore results from agents modifying their understanding of, or response to, previously established structures of legitimation, signification and domination (Arts 2000; Munir 2005). Irrespective of any impetus for change, the modification of an individual’s routine does not predict widespread social or institutional change (Yates 1997). Giddens (1984) used the notion of episodic change to understand large-scale social change in relation to time and across space. He indicated that as every social system is composed of “recurrent social practices” (p. 66) in the form of “regularized relations of interdependence between individuals or groups” (pp. 65–66) every action will influence and change other aspects of a system in known and unknown, and intended and unintended ways. Even the most insignificant change in turn influences other actions which create change and so on (Giddens 1984). This indicates, for example, that even the presence of an observer in a classroom will undoubtedly influence and therefore change the actions of a teacher, and in turn, those changes will potentially influence the future actions of that teacher. However, Munir (2005) referred to recent changes in the photographic industry to demonstrate that social change is more complex than can be explained episodically, because different structures change at different times and within different places, such that “events in themselves are not capable of

destabilising established practices” (p. 107). In other words, human reflexive monitoring continues throughout any change process, such that “actors produce sense-making schemes by either invoking existing institutional practices or by questioning them” (p. 108). This addressed Thrift’s (1985) concern that structuration apparently provides little account of short-lived changes that play a significant role in any social system, in that the intended and unintended outcomes of any action or routine must satisfy a reflective appraisal prior to being repeated. Thus, if an individual’s behaviour is to change, the aspects of unconscious knowledge which most strongly influence that behaviour must also change. This requires specific and authentic experiences which challenge prior understandings and established feelings of ontological security.

Some researchers have chosen to employ structuration specifically for its potential to facilitate an understanding of change processes. Structuration presents a unique perspective that as social life is constantly open to change by knowledgeable individuals, it is dynamic and not directed by universal laws. Jones et al. (2000) for example, used structuration as a framework for exploring the complex relationship of structure and agency in relation to innovation within technology companies. Their work differed from traditional studies in this field because they questioned the reasons for the appearance of new technologies, particularly in relation to what they described as “conditions under which technical change reinforces or modifies structure”. This work is particularly instructive for educational research, because it explored a process through which “practices are created, developed or reinvented”, and required a methodological approach with the ability to accommodate temporal dimensions (pp. 161–162).

Structuration as an ontological framework provides an excellent tool for analysing the structural and cultural interrelationships within a specific social setting (Turner, 2003, p. 488). Although Giddens’ work has not typically been employed within educational research (Gynnild 2002), structuration effectively frames educational issues by highlighting the complex and dynamic interrelationships between the immediate and the broader structural and cultural influences at work within an educational environment (Rose 1998). In light of this, structuration provided an ideal ontological framework through which to investigate the research issue discussed in this book—the development of educational rhetoric–reality gaps. The process used to effectively relate the ideals of structuration to this specific research issue is outlined below.

## 4.2 Relating Structuration to a Research Issue

Figure 3.3 highlights the ontological elements that contribute to the duality of structure and agency in social interaction, that is, in any social interaction in any context. It is an ontology-in-general framework. However, this ontology-in-general framework does not reflect the idiosyncrasies of a specific research issue as each of the ontological elements do not contribute equally to a specific social context. Given that it is not practical, or indeed possible, for the role and effect of each ontological



element to be fully understood through any one investigation (Parker 2000), it is important to identify which of the ontological elements interact to most significantly influence the research issue at hand. This begins with the development of a research specific ontology-in-situ framework. An ontology-in-situ framework indicates how the ontological elements manifest within the context in which the research issue is grounded, that is, how they relate to “particular practice[s] situated in a particular time and place” (Stones 2005, p. 35).

The development of a carefully considered ontology-in-situ framework is the most important phase of the design of any structuration-informed research. In order to generate data that will highlight the most critical relationships between the ontological elements that contribute most to a specific research issue, research activities must be guided by an ontology-in-situ framework that most closely reflects the social context in which the research issue is grounded.

The process described below provides an example of how to develop a structuration ontology-in-situ framework for a specific research issue, in this case, the development of educational rhetoric–reality gaps. Although this process is focused on an educational issue, it can be adapted to suit any research issue that requires an investigation of social interaction. The development of the most relevant and useful ontology-in-situ framework for any particular research issue requires:

- identifying the social context and the roles, or “position-practices” (Stones 2005, p. 48), through which the research issue will be investigated;
- identifying questions through which each of the ontology-in-situ elements will inform research activities to generate data;
- identifying the understanding of each of the ontology-in-situ elements to be gained from data analysis; and
- the design of the data generation techniques that most closely address the research needs as reflected by the ontology-in-situ framework.

It is important to note that the development of an ontology-in-situ framework is a dynamic process rather than a linear or fixed procedure. The more that a researcher considers, experiences and learns about a specific social context and the position-practices of individuals, or groups of individuals, within that context, the easier it is to more accurately relate the ontology-in-situ framework to the needs of the research issue. Only an ontology-in-situ framework that accurately relates the structuration ontological elements to the social context and position-practices of individuals through which a research issue is best investigated will lead to the generation of data from which an understanding of the complex and dynamic relationships between ontological elements can be gained.

### 4.3 Developing an Ontology-In-Situ Framework

The development of a structuration ontology-in-situ framework for understanding the development of educational rhetoric–reality gaps required careful consideration of: the ideals of structuration (Fig. 3.3); the research issue; the social context within



which the research issue occurred and would be investigated (educational institutions); and which of the various position-practices of the many individuals within that context could best provide insights into the research issue.

Educational rhetoric–reality gaps reflect the complex and dynamic interactions between the knowledgeableability of educators, the rhetoric of educational theory, the reality of pedagogical practice, and the socio-cultural rules and structural organisation that constitute educational institutions. The structuration ontological framework, and Giddens’ notion of the duality of structure and agency, indicate that both data generation and data analysis techniques for this research issue must take into account the richness of the educational context in which rhetoric–reality gaps exist, and work not to separate variables from that context but to integrate them in order to provide a most holistic understanding (e.g. Yin 2003). However, educational institutions are extremely complex social environments. Many individuals with very different roles (e.g. curriculum advisors, principals, teachers, parents and students) interact in ways that could influence the development of educational rhetoric–reality gaps. These interactions represent sets “of structured practices which position-incumbents can and do perform”, that is, routines of behaviour, or “position-practices” (Cohen 1989, p. 210). Giddens (1982) noted that when investigating such complex social situations “the most advanced form of understanding is achieved when researchers place themselves within the context being studied” because this is the most effective manner in which to “understand the viewpoints and the behaviour that characterises social actors” (p. 15). The position-practices of individual teachers in their classrooms (their usual working environment) therefore represented the most authentic context through which to identify the ways in which complexly interrelated human and structural elements of a school environment not only influenced those teachers’ classroom practices, but were also shaped by their practices, and how such relationships contributed to the development of educational rhetoric–reality gaps. Thus, the investigation of the development of educational rhetoric–reality gaps necessitated consideration of “the often delicate and subtle interlacings of reflexively organized action and institutional constraint” (Giddens 1991, p. 204) in ways that acknowledged: the roles, or “position-practices” (Stones 2005, p. 48), of individual teachers in determining classroom practices; the power relations established within the schools in which these teachers practiced; and the unique or contextually specific structural components of the school environments (Giddens 1984). In order to focus on these specific position-practices, the “shared broader framework” of the school institutional environments in which “rules and resources exist and are drawn upon” could be taken as already established (Stones 2005, p. 48).

In order to begin to understand how the ontological elements interrelated in ways that contributed specifically to the development of educational rhetoric–reality gaps, it was important to define some research boundaries within the ‘position-practices’ of particular teachers within specific educational institutions. The implementation of the Sustainable Schools Program (SSP) provided such boundaries (see Chap. 2). The educational aim of SSP was to facilitate social transformation towards environmental sustainability through the use of a socially-critical pedagogy as effective education *for* the environment in secondary and primary schools. The implementation of SSP as a vehicle for developing socially-critical pedagogies pro-

vided opportunities to explore teachers' responses to the requirement to implement a specific practice within their usual work environment—a situation in which the prevalence of rhetoric–reality gaps has been previously reported (e.g. Bishop and Russell 1985; Fien 2001; McKeown 2002; Robertson and Krugly-Smolska 1997; Stapp and Stapp 1983; Stevenson 2007) and which appropriately bounded cases designed to investigate the educational rhetoric–reality gaps, how they were produced, and how they were experienced and understood by teachers (Stones 2005, p. 48). The development of rhetoric–reality gaps in the implementation of SSP occurred when teachers failed to employ this socially-critical pedagogy, a practice that required them to more deeply and critically assess: the role of education in shaping human–environment relationships; the intended and unintended outcomes of their pedagogical practices; and the effect of both the structural and cultural elements of their working environment on their teaching practices. In other words, insights into the development of educational rhetoric–reality gaps required an understanding of the teachers' unique experiences of the “temporal, cultural, and structural contexts” in which they practiced and in which the rhetoric–reality gaps occurred (Charmaz 2000, p. 524).

Figure 4.1 shows a structuration ontology-in-situ framework that embraces the important aspects of the research issue in terms of the social context (school classroom), the ‘position-practices’ of certain individuals (teachers) and appropriate research boundaries (implementation of SSP) considered here as most important for providing research insights into the development of educational rhetoric–reality gaps. Each of the ontological elements is expressed as a question. Each question informs the focus for data generation—that is, the generation of data able to provide the most valuable insights into the development of educational rhetoric–reality gaps.

As stated earlier, there is no single or definitive ontology-in-situ framework for a particular research issue. Like all social research, the knowledgeable ability of an individual researcher and the social context in which they are researching will not only influence the manner in which the research is framed and conducted, but will also be shaped by the research activities. Thus, an ontology-in-situ framework essentially reflects just one researcher's momentary perspective of an issue. For example, the educational rhetoric–reality gap issue could be investigated from the perspective of principals attempting to improve the pedagogical practices of the teachers in their schools, or from the perspective of the students' engagement with the pedagogical practices of their teachers. Similarly, the same issue could be investigated from the perspective of the curriculum writers and the quality of the materials provided to the schools and teachers, or in terms of parents' expectations and the socio-cultural rules of a school classroom. It is also important to consider the benefits of investigating the duality of structure and agency, represented by a specific research issue, in terms of change in both time and space. For example, an individual teacher's preferred pedagogical practices are likely to change due to such things as experience (time), stated curriculum outcomes, particular cohorts of students, or the physical and emotional aspects of a teaching environment. Importantly, an ontology-in-situ framework is a dynamic resource, and as a researcher continues to explore a particu-

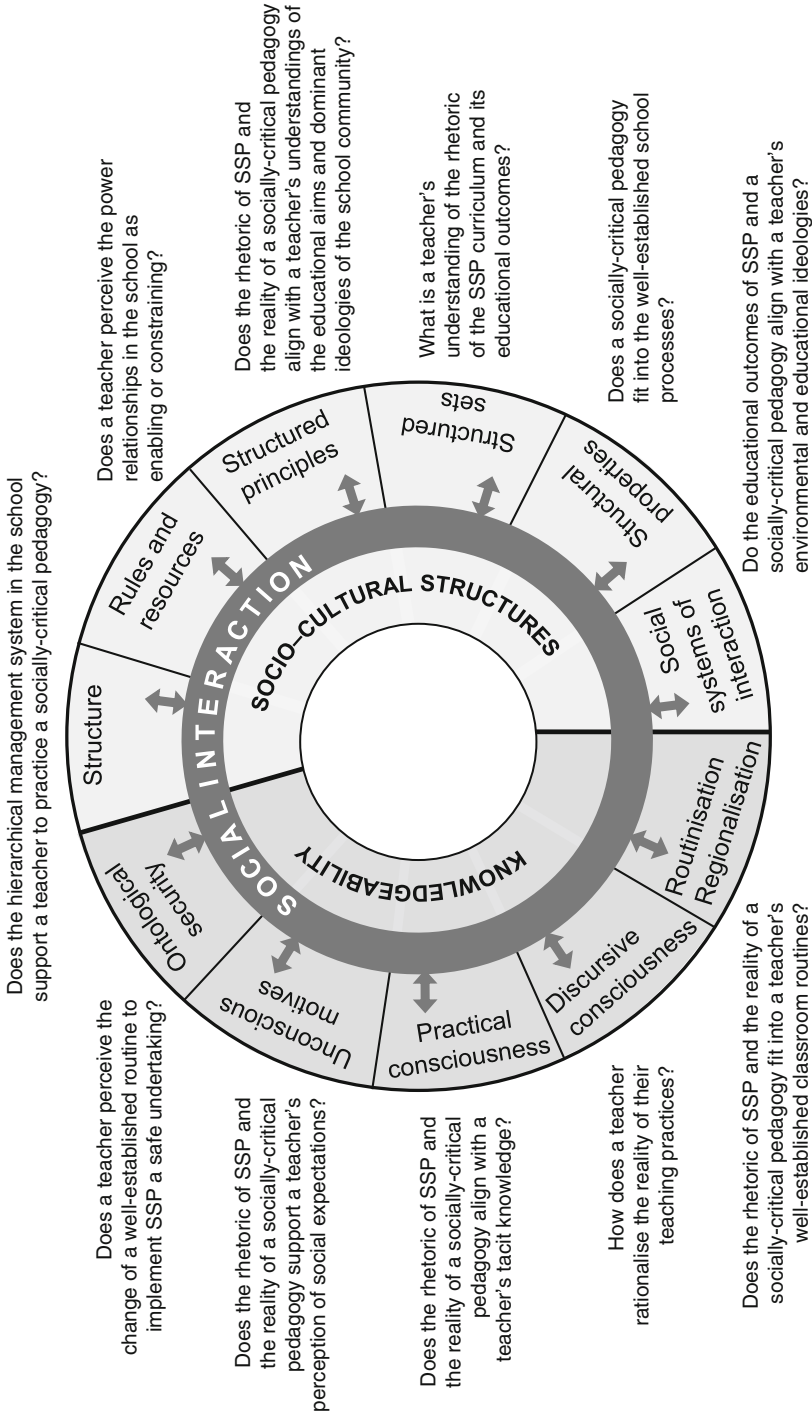


Fig. 4.1 A structuration ontology-in-situ framework: focus for data generation

lar issue the framework may be progressively up-dated, and the focus of data generation adjusted, to more effectively address the research goals.

An ontology-in-situ framework, such as that presented in Fig. 4.1, relates each ontological element to a specific research issue. This framework provides questions in order to focus data generation, but it does not specify the exact understanding or insight to be gained by answering those questions. An effective and informative ontology-in-situ framework must also reveal the reason for asking such questions, that is, it must provide a focus for data analysis. The statements given in Fig. 4.2 indicate the intended focus for data analysis for each of the questions that relate the ontological elements to the research issue. For example, Fig. 4.2 relates the ontological element ‘unconscious motives’ to the research issue through the question ‘Does the rhetoric of SSP and the reality of a socially-critical pedagogy support a teacher’s perception of social expectations?’. Figure 4.2 indicates that the understanding derived from answering this question includes ‘The ways in which a teacher’s practices respond to, and/or reflect, certain social expectations’.

Many of the relationships between the questions of Fig. 4.1 and the statements of Fig. 4.2 are somewhat obvious, but they form an important component of effectively employing structuration to inform research. These statements more closely align each of the ontological elements to the specific research issue, and more directly inform the design of research activities capable of generating data that incorporates the information that, through analysis, can best contribute to the research aims. Together, Figs. 4.1 and 4.2 provide an ontology-in-situ framework that indicates the way in which the concepts of structuration can inform research by being “used in a selective way in thinking about research questions [and] interpreting findings” (Giddens 1991, p. 225).

Details of the research design, including the epistemological perspective and data generation techniques used to investigate the research issue of the development of educational rhetoric–reality gaps are given elsewhere (Edwards 2011). The following discussion highlights and expands on important aspects of that research design, particularly the choice of data generation techniques, in order to provide an example of how to adapt and use a structuration ontology-in-situ framework to effectively inform research.

#### 4.4 An Ontology-In-Situ Framework at Work

There is no preferred, or ‘correct’, way in which to design a research process to best address the structuration ontology-in-situ framework presented in Figs. 4.1 and 4.2. In order to investigate the development of educational rhetoric–reality gaps, a case study methodology was chosen as most appropriate for investigating the “context-dependent knowledge and experience” of teachers (Flyvbjerg 2004, p. 421). This methodology supported the ontology-in-situ framework by providing opportunities to “‘close-in’ on real-life situations and test views directly in relation to phenomena [rhetoric–reality gaps] as they unfold[ed] in practice” (Sørensen 1997, p. 428),

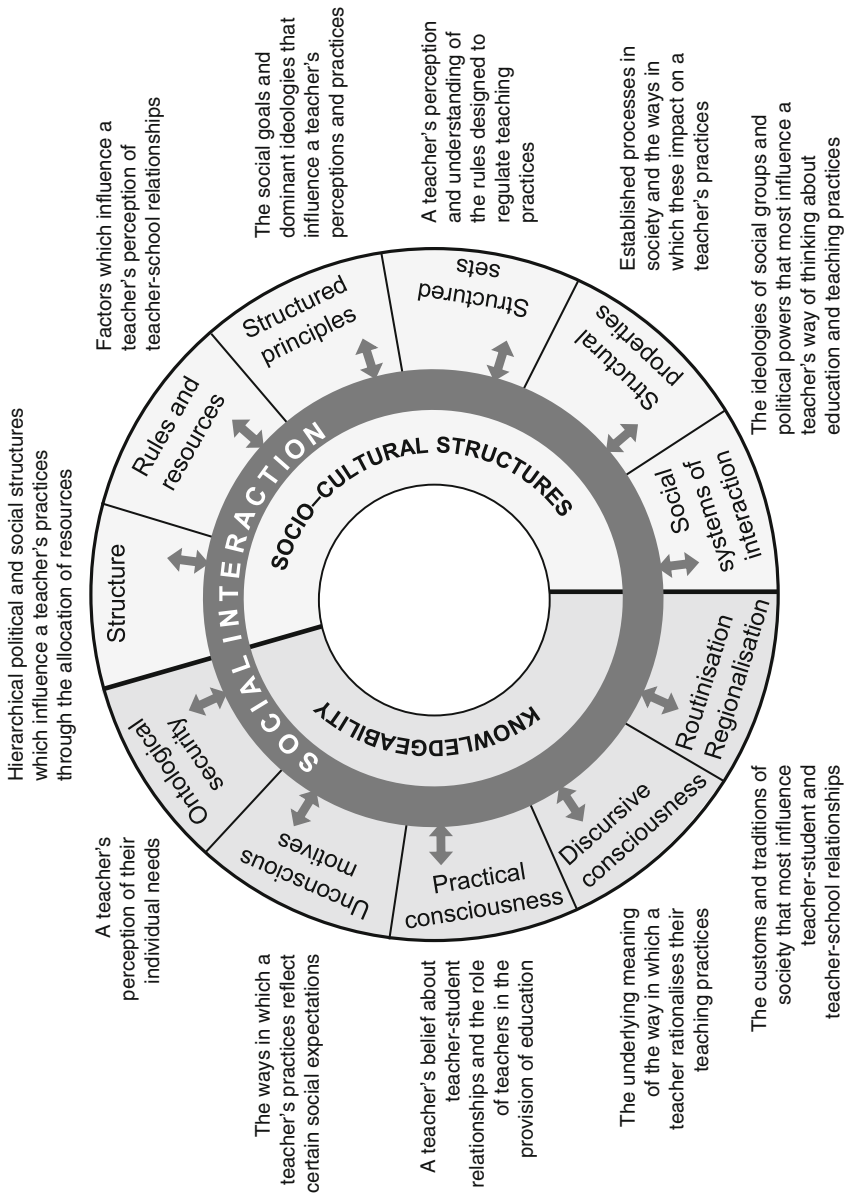


Fig. 4.2 A structuration ontology-in-situ framework: focus for data analysis

which in turn provided a rich and holistic understanding of the interrelatedness of the “temporal and spatial, historical, political, economic, cultural, social and personal” aspects of the teachers’ practices and perceptions of their work (Stake 1995, p. 43). Each case study explored an authentic social context (a classroom), bounded by a “broader institutionalised and system-structural” location (a school), and the “position-practices” of an individual (a teacher) (Stones 2005, pp. 48, 83). The teachers’ case studies are presented in Chap. 5.

The case study methodology also facilitated the use of a variety of data generation activities,<sup>1</sup> each chosen for its ability to provide insights into specific aspects of the structuration ontology-in-situ framework (Figs. 4.1 and 4.2). For example, participation in SSP professional development sessions in schools provided insights into the rules and policies (structured sets), educational aims (structured principles) and hierarchical systems (structure) that influenced the teachers’ implementation of SSP. Classroom observations provided insights into critical ontological elements, including the established behavioural routines (routinisation and regionalisation), and the established processes, or constraints (structural properties), unique to each teacher’s work environment. Classroom observations also contributed to understanding educational rhetoric–reality gaps through insights into the influence of not only conscious understandings (such as self-reports made in subsequent interviews), but also unconscious and non-conscious ideas (the relationship between practical and tacit knowledge) in directing the teachers’ classroom practices (Silverman 2001).

The suitability of a case study methodology to the research issue of the development of educational rhetoric–reality gaps, as represented in the ontology-in-situ framework, is easily justified, particularly as the ability to employ several data generation techniques clearly assists to provide insights into a wide-range of ontological elements within a specific social context. The use of this methodology, and the incorporation of a range of participation, observation, and interview-based data generation techniques, was in no way special or specific to structuration-informed research. However, in any research activity, it is important to carefully relate the aims of each data generation activity with the ontology-in-situ framework, particularly in terms of the understandings to be gained through data analysis. This is not always a straight forward process. For example, developing a holistic understanding of an individual’s knowledgeability can be problematic. The classroom observations of a teacher’s practices, in conjunction with that teacher’s justifications for those practices, fail to directly address the need to explore that teacher’s practical consciousness (see Sect. 3.3) in order to answer the ontology-in-situ question ‘Does the rhetoric of SSP and the reality of a socially-critical pedagogy align with a teacher’s tacit knowledge?’ (Fig. 4.1) and ultimately to understand ‘A teacher’s belief about teacher-student relationships and the role of teachers in the provision of education’ (Fig. 4.2). The ontology-in-situ framework indicates that this understanding, as part of a teacher’s knowledgeability, must have contributed to, and had been

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<sup>1</sup>Data generation, including participation in professional development sessions, interviews and classroom observations were undertaken during the final school term of 2006, to coincide with the time that several schools were beginning to implement SSP.

shaped by, that teacher's classroom practices, and therefore, the development of rhetoric–reality gaps. It was therefore important to find a research technique that provided insights into each teacher's practical consciousness.

#### ***4.4.1 Investigating Teachers' Knowledgeability***

Face-to-face interviews were valuable for encapsulating the teachers' perceptions of their experience of implementing SSP (Patton 1990, p. 278). Each interview provided insights into the relationship between structure and agency in the teachers' work environments, particularly in relation to ontological security, unconscious motives, practical consciousness and discursive consciousness. Interviews also highlighted aspects of both implicit and explicit rules and resources as factors influencing the teachers' classroom practices, and revealed critical aspects of social systems of interaction and structured principles directing the teachers' perceptions of their actions. However, as noted by Giddens, knowledgeability is an unfathomable mix of human expectations, motivations and perceptions (see Sect. 3.4). This means that the teachers' descriptions of, or justifications for, classroom practices provided in interviews were unlikely to completely reveal the way in which knowledge and actions were truly interrelated in the development of rhetoric–reality gaps. In order to more fully explore teachers' knowledgeability, and to provide more reliable insights into relationships between knowledgeability and structural ontological elements, hypothetical scenarios were incorporated into interviews. The use of hypothetical scenarios also addressed the observation that the teachers lacked a shared understanding, or language, for discussing educational theory in relation to pedagogy in practice.

Three short hypothetical scenarios, each of which represented specific “assertions about a possible or hypothetical reality” (Wood 2010, p. 2) of a distinctive pedagogical approach to implementing SSP were presented during interviews for discussion with teachers. Each scenario represented different understandings of knowledge, teacher–student relationships, the role of assessment, and the school community. These were modelled on the curriculum orientations work of Kemmis et al. (1983): liberal–progressive pedagogy; socially–critical pedagogy; and vocational/neo–classical pedagogy. Each hypothetical scenario, with a description of the essential characteristics of the relevant pedagogical approach, is given in Tables 4.1, 4.2 and 4.3 respectively. The use of these scenarios assisted teachers to connect “with the reality being researched” by being able to “explore circumstances” they may not have previously experienced (Wood 2010, pp. 4, 7). Hypothetical scenarios provided a neutral space for interaction, welcomed by teachers already anxious about the implementation of SSP (Van Der Heijden 2005) and allowed a degree of separation of subject and object, or methodological bracketing, which enabled teachers to consider the internal and external factors that influenced pedagogy separately (Cassidy and Tinning 2004). Morrow and Torres (2002) agreed that a degree of methodological bracketing was important, stating that “social agents and the documents of a culture must be confronted with cognitions and experiences that



**Table 4.1** Hypothetical scenario: a liberal–progressive pedagogy

<b>Hypothetical scenario (1) presented to teachers</b>	<p>At a school curriculum meeting, and in response to teachers’ observations of improved student engagement during hands-on outdoor activities, teachers designed a project for Grade 3 students to grow native plants around the school. This project will integrate aspects of both the science (ecosystems/food webs) and SOSE (human–environment relationships) key learning areas. Teachers will organise a guest speaker from the local Indigenous community to talk about traditional use of plants, and schedule a forest walk with a parks officer to explain the roles of native plants in local environments. The class will study the local ecosystem with a view to choosing appropriate plants for inclusion in their school garden. Students will work in pairs to choose a focus for their study, and in consultation with their teacher, design learning activities. Formal assessment will require students to present research results as posters. Peer feedback will be encouraged, and final posters are to be displayed around the school for parents and visitors to view. Teachers will also note student collaboration and participation during planting activities. Garden planting might include weekend workshops with parental assistance.</p>
<b>Essential pedagogical characteristics</b>	<p><i>The teacher outlines learning goals and assessment criteria. In many instances students may have a choice about how they will achieve these.</i></p> <hr/> <p><i>The teacher is responsive to student interests, concerns and prior knowledge.</i></p> <hr/> <p><i>Projects are used as a method for building on important knowledge in order to gain a thorough understanding.</i></p> <hr/> <p><i>SSP is being incorporated into existing science and SOSE curricula, thereby maintaining traditional subject boundaries.</i></p> <hr/> <p><i>The teacher facilitates learning by organising activities and opportunities to hear from other members of society, or to visit different regions.</i></p> <hr/> <p><i>The teacher’s role is to arrange learning opportunities which motivate and encourage students to explore—experiences to help students make ‘sense’ of their world.</i></p> <hr/> <p><i>Learning often occurs through experiences where students explore, problem solve, and share ideas in order to develop meaning.</i></p> <hr/> <p><i>Assessment is part of the learning process, and incorporates opportunities for students to evaluate their own learning—self and/or peer assessment.</i></p> <hr/> <p><i>Students may choose to undertake different aspects of the overriding project, but all work is related to the teacher’s determination of the knowledge to be gained.</i></p> <hr/> <p><i>Final assessment will reflect both work quality (grade) and observed development of personal skills (descriptive).</i></p> <hr/> <p><i>Teacher and student negotiate the value of the knowledge and skills to be learned.</i></p> <hr/> <p><i>Parents are encouraged to assist in some aspects of certain learning activities.</i></p>

**Table 4.2** Hypothetical scenario: a socially–critical pedagogy

<b>Hypothetical scenario (2) presented to teachers</b>	At a local meeting involving members of the extended school community and local residents, students canvassed ideas for establishing their role in the sustainable development of their community. Multi-age student groups explored ideas from this meeting to develop a sustainable environmental project. For example, one group chose to design and create sustainable indigenous gardens in and around local industrial/factory sites. With assistance from teachers as required, this group worked collaboratively to develop the knowledge and skills from all areas of the curriculum they needed in order to undertake this project. They negotiated with and learned from local park officers, industry owners, indigenous people, environmental groups, and local residents. Their project involved activities such as collecting indigenous seeds, propagating seedlings and designing and developing sustainable garden areas. Each student negotiated with their teacher how they might demonstrate their personal development, participation, and learning throughout the project. Teachers provided students and parents with descriptive assessments that often incorporated responses from the local community.
<b>Essential pedagogical characteristics</b>	<p><i>Student learning occurs through democratic participation in their community.</i></p> <p><i>Student decision-making is an important component of learning.</i></p> <p><i>Students learn that knowledge is based on experience and reflection of self and others.</i></p> <p><i>Teachers and students are co-learners. Students work collaboratively and develop interpersonal skills alongside other learning outcomes.</i></p> <p><i>Students have opportunities to act in ways that shape their school and their society.</i></p> <p><i>Learning groups are often multi-aged and/or incorporate community members.</i></p> <p><i>Most aspects of the learning are directed by students with assistance from teachers as required.</i></p> <p><i>SSP is integrated throughout the curriculum to broaden learning experiences and to maximise opportunities for learning and acting within the community and local area.</i></p> <p><i>Teachers monitor learning to ensure students develop critical awareness of themselves and society, such that learning incorporates both understanding and action.</i></p> <p><i>Assessment requirements are negotiated between teacher and students.</i></p> <p><i>Assessment is primarily descriptive, representing personal development and community achievement. This may include evidence in the form of self, peer and community assessment.</i></p> <p><i>Students develop their understanding of self as a product of their society.</i></p>

**Table 4.3** Hypothetical scenario: a vocational/neo-classical pedagogy

<p><b>Hypothetical scenario (3) presented to teachers</b></p>	<p>A teacher is designing lessons for a series of scheduled science classes—a program which incorporates students’ interests in environmental issues while addressing essential learning requirements. This teacher has identified that, in readiness for further education, and as stipulated by government curriculum documents, Grade 6 students must understand the process of scientific inquiry. The teacher will identify reliable internet resources and appropriate books within the school library to enable students to answer the question “How do scientists work?” A parent scientist from a conservation group may visit the class to explain some aspects of their work. Students will present their answers to the class, and the teacher will compile and refine their ideas to define the scientific process. In order to demonstrate and consolidate their understanding, students will then conduct an actual investigation during science classes. Students choose from a list of environmental or sustainable development questions relating to the importance of native plants. These questions are designed by the teacher to maximise the chances of successful completion with the science laboratory resources and time available, and for their potential to provide students with an opportunity to develop essential science curriculum understandings. A template will be provided for students to use in writing a science report for assessment.</p>
<p><b>Essential pedagogical characteristics</b></p>	<p><i>The teacher identifies the appropriate concepts and topics to be incorporated into any curriculum and allocates topics that combine student interests and teacher-perceived educational needs of society.</i></p> <p><i>The overriding educational aim is to develop knowledge and skills as deemed to represent the practical requirements of society. SSP is used here to help students develop an essential understanding, namely an understanding of scientific process.</i></p> <p><i>Parental consent is required for extra-curricula activities. Parents rarely participate in day-to-day learning activities.</i></p> <p><i>Essential factual knowledge is obtained from reliable sources.</i></p> <p><i>Resources, such as books, materials or websites, are located and provided by the teacher—appropriate times are allocated during which students may access these resources.</i></p> <p><i>The role of knowledge and skills is explained in terms of an occupational perspective.</i></p> <p><i>The teacher is the authority in the classroom and uses their teaching skills to motivate students and to ensure essential knowledge is palatable to them. The teacher determines what are the most effective and efficient learning environments.</i></p> <p><i>This is a knowledge-based education. Learning is achieved through a logically structured sequence of lessons.</i></p> <p><i>The emphasis of any lesson is on producing products to be formally assessed.</i></p> <p><i>The teacher directs students to the most important knowledge and directs how students present their learning/understanding of this knowledge.</i></p> <p><i>Grades are allocated according to set criteria or standards.</i></p>

allow a form of ‘distanciation’ from everyday reality based on explanatory accounts that elucidate the constraining and enabling effects of social structures” (p. 44).

Unannotated copies of the hypothetical scenarios were provided to teachers with the following instructions:

Read the following three hypothetical scenarios. Each is an example of one approach that a teacher might take to implement aspects of the Sustainable Schools Program in their classroom. The topic of ‘native plants’ has been chosen to demonstrate these three alternative approaches and teaching styles. These are not presented in any particular order.

Each teacher was encouraged to offer comments about the scenarios as they read. When finished, and depending on the extent of their previous comments, semi-structured questions were used to prompt them to reflect more deeply upon the hypothetical scenarios, to consider aspects of the scenarios they had not commented upon, and to confirm and expand ideas as they might relate to SSP, and in turn, reflect the ideas represented in the ontology-in-situ framework.

The hypothetical scenarios enabled teachers to position themselves within educational practice theory in a manner which developed understanding through commonly shared experiences and broad understandings rather than a specific academic language. This elicited rich discussions by encouraging teachers to explore ideas most central to their own constructions and interpretations of teaching as a practice, using their own language, and unencumbered by a framework defined by specific questions (Burgess and Rudduck 1993; Merton et al. 2001). The use of the scenarios as a reflective interview process encouraged teachers to consider a broad range of ideas. Each teacher’s comments were often not specific to the way in which they chose to implement SSP, but indicative of more personal ideals or unconscious knowledge (Scheurich 1997). Such unconscious knowledge was often recognised by the use of different discourses when referring to different scenarios.

Most significantly, the use of the hypothetical scenarios as part of the interview process provided valuable insights into both the conscious and non-conscious knowledgeability underlying the classroom practices and teaching ideals of the teachers, and their perspectives of the structural elements of their community, school, and classroom. Understanding these ontological aspects of each teacher’s working environment was vital for exploring why teachers were implementing SSP in the ways observed and therefore central to understanding the development of educational rhetoric–reality gaps.

## 4.5 An Ontology-In-Situ Framework and Data Analysis

As represented in Figs. 4.1 and 4.2, a structuration ontology-in-situ framework identifies how each of the ontological elements can contribute to developing an understanding of the social interactions of a specific social context. Each ontological element, framed as a question, indicates one aspect of knowledge that could contribute to the understanding of a specific research issue. However, the notion of

a duality of structure and agency represented by structuration requires exploration of the complex and dynamic relationships between the structural and hermeneutic ontological elements of a social context rather than focusing on individual elements in isolation. Giddens' did not prescribe a preferred method for the analysis of the data from structuration-informed research. The data generated from research activities informed by a well-constructed ontology-in-situ framework will reveal important relationships between individual ontological elements if the data analysis is undertaken with reference to the ideals of structuration, particularly the duality of structure and agency. Thus, irrespective of the research methods chosen, data analysis must embrace a 'structuration perspective'.

A detailed description of the data analysis process used to investigate the research issue of the development of educational rhetoric–reality gaps is given elsewhere (Edwards 2011). The following discussion uses this research issue as an example of how to embrace a structuration perspective during the analysis of data generated by techniques informed by the well-constructed ontology-in-situ framework represented in Figs. 4.1 and 4.2.

#### ***4.5.1 A 'Structuration Perspective'***

In order to provide insights into the relationships between the ontological elements that most influence a specific research issue, the data generated through structuration-informed research activities requires a process of analysis that embraces a structuration perspective. A structuration perspective simply refers to the acknowledgement of the ideals of structuration, and in particular, the notion of the duality of structure and agency. Any method of data analysis can be adapted to embrace a structuration perspective, and a structuration perspective can be applied to the analysis of data that is generated from any social interaction or social context. A structuration perspective incorporates the understanding that while data generation may have addressed the statements and provided answers for the questions of an ontology-in-situ framework, it is the relationships between these aspects of the ontological elements that will contribute most to understanding the research issue.

A comparison of the relationships between the ontological elements that define the different ways in which a research issue is expressed within a social context, or which define the different position-practices of individuals within that context, can provide valuable insights into that research issue. In order for this to occur, it is essential to identify the expressions of a research issue that are most suitable for comparison. There is no right or wrong way in which to do this. In any structuration-informed research, the ways in which an issue is expressed will be intimately related to the appropriate social context, and strongly represented in the ontology-in-situ framework. For example, different expressions of the research issue of the development of educational rhetoric–reality gaps were identified through the assessment of the following aspects of the position-practices of the teachers implementing SSP:

- rhetoric—the teachers’ understanding of curriculum guidance documents related to SSP and the socially-critical pedagogy embedded with them;
- reality—the manner in which the teachers were, or were not, implementing the socially-critical pedagogy of SSP; and
- the teachers’ experiences of implementing SSP within their school—relationships between structure and agency in the teachers’ work environments.

The data showed that the teachers held a similar understanding of the curriculum guidance documents related to SSP and the socially-critical pedagogy embedded with them (structured sets). However, the data also indicated that the position-practices of the teachers implementing SSP could be grouped according to whether or not each teacher was actually implementing a socially-critical pedagogy in conjunction with whether or not each teacher was working within a school environment that they perceived to be supportive of their efforts to implement the program (see Chap. 5). The case studies of teachers from each of these four groups provided opportunities to compare the manner in which different ontological elements contributed to the duality of structure and agency to either enable, or constrain, a teacher’s practices in ways that represented either best educational practice, or an educational rhetoric–reality gap (see Chap. 6).

The data analysis technique of comparing aspects of the different expressions of a research issue is not specific to the use of structuration. In terms of the research issue of the development of rhetoric–reality gaps, such a comparison simply identified the ideas, or themes, that represented the position-practices of individual teachers and distinguished the behaviours that represented best teaching practice from the behaviours that represented rhetoric–reality gaps. Each theme could be linked to an ontological element, as highlighted by the ontology-in-situ framework that informed the research activities. Although each theme was certainly relevant to the expression of the research issue, considered in isolation these themes failed to fully explain the development of rhetoric–reality gaps. A structuration perspective required an exploration of the ways in which each of the identified themes, or ontological elements, interacted with each other. In other words, these themes had the ability to reveal the relationships between the ontological elements of the teachers’ work environments that influenced the presence, or absence, of the educational rhetoric–reality gaps in the implementation of SSP. Embracing a structuration perspective provided the opportunity to develop a more holistic view of the duality of structure and agency in the development of these educational rhetoric–reality gaps (see Chap. 7).

Thus, each case study revealed a unique perspective of the dynamic and complex ontological reality of the teachers’ roles as educators, and some of the most important relationships between structure and agency that the teachers indicated defined their roles, and which both enabled, and constrained, their pedagogical practices. Each of these perspectives provided valuable insights into educational rhetoric–reality gaps, and the use of a structuration perspective highlighted critical aspects of the duality of structure and agency that helped to define each of the different ways

in which the research issue was expressed, through the position-practices of the teachers, within the context of implementing SSP in different schools.

As such, each case study represented just one perspective of the structuration effects of an overarching “broader institutionalised and system-structural” location, that is, an educational institution (Stones 2005, p. 83). Although the ontological elements of that broader institutional environment were not individually or specifically investigated, and were not identified by the teachers as most critical to their pedagogical choices, the ontology-in-situ framework indicated that the teachers’ perceptions of those elements would certainly have influenced their practices. Applying a structuration perspective therefore required analysis of the data in order to identify how the ontological elements of that broader institutional environment, through the perspectives of the teachers, interrelated to influence the development of educational rhetoric–reality gaps. This was essential in order to identify a possible intervention point, or ontological element, through which activities and/or policies designed to reduce the development of educational rhetoric–reality gaps could be introduced into an institutional environment in which teachers work (see Chap. 8).

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